

RECEIVED
CENTRAL FAX CENTER

PATENT

JAN 17 2007

Atty Docket No.: 200206643-1
App. Ser. No.: 10/697,687REMARKS

Favorable reconsideration of this application is respectfully requested in view of the amendments above and the following remarks.

By virtue of the amendments above, Claims 1, 16, 26, and 24 have been amended and Claims 5, 19, and 29-33 have been canceled without prejudice or disclaimer of the subject matter contained therein. In addition, Claims 45-50 have been added. Therefore, Claims 1-4, 6-18, 20-28, and 34-50 are pending, of which, Claims 1, 16, 26, 34, and 46 are independent.

No new matter has been introduced by way of the claim amendments or additions; entry thereof is therefore respectfully requested.

Election/Restriction

The Official Action has held that the prior Restriction requirement, which asserts that Claims 29-33 are directed to an invention that is separate and distinct from Claims 1-28 and 34-44, is final. Although Applicants respectfully disagree with this assertion, Applicants have canceled Claims 29-33 without prejudice or disclaimer of the subject matter contained therein to further prosecution of the present application.

Drawings

The indication that the drawings submitted on October 31, 2003 have been accepted is also noted with appreciation.

PATENT

Atty Docket No.: 200206643-1
App. Scr. No.: 10/697,687

Information Disclosure Statements

The indication that the documents cited in the Information Disclosure Statements filed on October 31, 2003 and July 18, 2005 have been considered is also noted with appreciation.

Claim Objections

The Official Action has objected to Claim 5 as having a misspelled word. By virtue of the amendments above, Claim 5 has been canceled and the contents therein have been inserted in independent Claim 1. In addition, the term "opposite" has been correctly spelled therein.

Accordingly, it is respectfully submitted that the objection to Claim 5 is now moot.

Claim Rejection Under 35 U.S.C. §102

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. § 102, the Court stated:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

PATENT

Atty Docket No.: 200206643-1
App. Ser. No.: 10/697,687

Therefore, if the cited reference does not disclose each and every element of the claimed invention, then the cited reference fails to anticipate the claimed invention and, thus, the claimed invention is distinguishable over the cited reference.

Claims 1-4, 6-9, 11, 16-18, 20-23, 26, 27, and 34-42

Claims 1-4, 6-9, 11, 16-18, 20-23, 26, 27, and 34-42 have been rejected under 35 U.S.C. 102(b) as allegedly being anticipated by WO 00/10216 (WO '216). This rejection is respectfully traversed because WO '216 fails to disclose each and every element claimed in independent Claims 1, 16, 26, and 34 and the claims that depend therefrom.

The Official Action asserts that WO '216 fails to disclose the features of Claims 5 and 19. *Official Action, par. 6.* By virtue of the amendments above, Claims 1, 16, 26, and 34 have been amended in various forms to include the features of either Claim 5 or Claim 19, which have both been canceled. Therefore, Claims 1, 16, 26, and 34, as amended, cannot be construed as being anticipated by the disclosure contained in WO '216.

Accordingly, the Examiner is respectfully requested to withdraw the rejection of independent Claims 1, 16, 26, and 34 and to allow these claims. The claims that depend upon independent Claims 1, 16, 26, and 34 are also allowable over the disclosure contained in WO '216 at least by virtue of their respective dependencies.

In addition, the depending claims are allowable over WO '216 for reasons in addition to their dependencies. For instance, the Official Action has asserted that Claim 21 is anticipated by Figures 9a and 9b of WO '216 on the alleged basis that "[a]dditional fuel cells can be disposed in a common gasket scaling arrangement" as shown in these figures. This rejection is improper because Claim 21 recites "forming an additional fuel cell component

PATENT

Atty Docket No.: 200206643-1

App. Ser. No.: 10/697,687

from at least one of the first polymeric gasket and the second polymeric gasket.” In other words, Claim 21 recites that, in addition to functioning as a gasket, at least one of the first polymeric gasket and the second polymeric gasket may also be formed to function as an additional fuel cell component.

As discussed on page 9, lines 3-10 of the present *Specification*, the additional fuel cell component may comprise a chamber formed by at least one of the first polymeric gasket and the second polymeric gasket. Clearly, neither Figures 9a or 9b of WO '216 disclose this claimed feature. Accordingly, the Official Action has failed to establish that Claim 21 is anticipated by WO '216.

Claim Rejections Under 35 U.S.C. §103(a)

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in MPEP § 706.02(j):

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Therefore, if the above-identified criteria are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

PATENT

Atty Docket No.: 200206643-1
App. Scr. No.: 10/697,687

Claims 5 and 19

Claims 5 and 19 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over WO 00/10216 (WO '216) in view of U.S. Patent No. 6,127,058 to Pratt et al. This rejection is respectfully traversed because WO '216 and Pratt et al., considered singly or in combination, fail to disclose all of the features of independent Claims 1, 16, 26, and 34 and the claims that depend therefrom.

As noted above, independent Claims 1, 16, 26, and 34 have been amended in various respects to include the features of now canceled Claims 5 and 19. Thus, the rejection of Claims 5 and 19 will be addressed with respect to independent Claims 1, 16, 26, and 34.

The Official Action correctly notes in paragraph 6 thereof, that WO '216 fails to disclose that current collector plates are attached to opposite sides of the gasket 1, as now claimed in Claims 1, 16, 26, and 34. In an effort to make up for the deficiencies in WO '216, the Official Action relies upon the disclosure contained in Pratt et al. More particularly, the Official Action asserts that Pratt et al. discloses a membrane electrode assembly (MEA) 23 sandwiched between current collector assemblies 21/22. *Pratt et al., Abstract, and Figure 2.*

As depicted in Figure 2 of Pratt et al., the MEA 23 includes a plurality of anodes 27 and a plurality of cathodes 28 on an electrolyte sheet. As such, Pratt et al. fails to disclose that a gasket is placed around the peripheries of each MEA 23. Instead, Pratt et al. discloses that the current collector assemblies 21/22 include assembly frames 24 having walls 29 configured to be positioned between the anodes 27 and between the cathodes 28. In this regard, the walls 29 form parts of the current collector assemblies 21/22 and are thus not described as being attached to the MEA 23. It appears, instead, that the walls 29 merely contact the MEA 23.

PATENT

Atty Docket No.: 200206643-1
App. Ser. No.: 10/697,687

In fact, in Figure 3, Pratt et al. depicts the frame 24 as having channels or distribution means 35 formed in the walls 29. As such, Pratt et al. is unconcerned with attaching barriers, such as, gaskets, between the anodes 27 and between the cathodes 28. In addition, it appears that Pratt et al. relies solely on the electrolyte sheet to separate the anode side from the cathode side of the MEA 23 and thus does not require the use of a gasket 1 depicted in WO '216.

Neither WO '216 nor Pratt et al. discloses that an anode collector plate and a cathode collector plate are attached to opposite surfaces of a gasket attached to an uncovered portion of a polymer electrolyte membrane as claimed in Claims 1, 16, 26, and 34. As such, the combination of WO '216 and Pratt et al. proposed in the Official Action would also fail to disclose this feature. As such, even if a person of ordinary skill in the art were somehow motivated to combine the disclosures of WO '216 and Pratt et al. as suggested in the Official Action, the proposed combination would still fail to yield the present invention as claimed in independent Claim 1, 16, 26, and 34.

Accordingly, the Official Action has failed to establish that independent Claims 1, 16, 26, and 34, and thus, the claims that depend therefrom, are *prima facie* obvious in view of the disclosures contained in WO '216 and Pratt et al. The Examiner is therefore respectfully requested to allow the Claims 1, 16, 26, and 34 and the claims that depend therefrom.

Claims 10 and 28

Claims 10 and 28 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over WO 00/10216 (WO '216) in view of WO 99/52164 (WO '164). This rejection is respectfully traversed because WO '216 and WO '164, considered singly or in

PATENT

Atty Docket No.: 200206643-1
App. Ser. No.: 10/697,687

combination, fail to disclose all of the features of independent Claims 1 and 26 and the claims that depend therefrom.

The Official Action correctly notes that WO '216 fails to disclose containment chambers and means for providing fuel containment comprising means for supporting a plurality of MEAs in a stacked arrangement. In an effort to make up for the deficiencies in WO '216, the Official Action relies upon the disclosure contained in WO '164. More particularly, the Official Action asserts that WO '164 discloses "a solid electrolyte fuel cell which has a sealed perimeter and wherein each electrode side includes a respective reactant chambers 104 and 108 to provide reactant flow entirely across their respective electrodes." The Official Action also relies upon WO '164 for its alleged disclosure "of providing a stacked arrangement in combination with particular containment chambers."

As such, the Official Action has not asserted or proven that WO '164 makes up for the deficiencies in WO '216 discussed above. More particularly, the Official Action has not asserted that WO '216 discloses that an anode collector plate and a cathode collector plate are attached to opposite surfaces of a gasket attached to an uncovered portion of a polymer electrolyte membrane as claimed in Claims 1, 16, 26, and 34. As such, even if a person of ordinary skill in the art were somehow motivated to combine the disclosures of WO '216 and WO '164 as suggested in the Official Action, the proposed combination would still fail to yield the present invention as claimed in independent Claims 1 and 10.

Accordingly, the Official Action has failed to prove that independent Claims 1 and 10, and thus, the claims that depend therefrom, are *prima facie* obvious in view of the disclosures contained in WO '216 and WO '164. The Examiner is therefore respectfully requested to withdraw the rejection of Claims 10 and 28 and to allow these claims.

PATENT

Atty Docket No.: 200206643-1
App. Ser. No.: 10/697,687

Claims 12-15, 24, and 25

Claims 12-15, 24, and 25 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over WO 00/10216 (WO '216) in view of U.S. Patent Application Publication No. 2004/0220048 to Leban. This rejection is respectfully traversed because WO '216 and Leban, considered singly or in combination, fail to disclose all of the features of independent Claims 1 and 16 and the claims that depend therefrom.

WO '216 fails to disclose or reasonably suggest all of the features of independent Claims 1 and 16 as discussed above. In addition, the Official Action cannot reasonably rely upon the disclosure contained in Leban to make up for the deficiencies in WO '216. In fact, the Official Action only relies upon Leban for its alleged discussion of "a plurality of substantially planar fuel cells within a common gasket arrangement." As such, even if a person of ordinary skill in the art were somehow motivated to combine the disclosures of WO '216 and Leban as suggested in the Official Action, the proposed combination would still fail to yield the present invention as claimed in independent Claims 1 and 16.

Accordingly, the Official Action has failed to prove that independent Claims 1 and 16, and thus, the claims that depend therefrom, are *prima facie* obvious in view of the disclosures contained in WO '216 and Leban. The Examiner is therefore respectfully requested to withdraw the rejection of Claims 12-15, 24, and 25 and to allow these claims.

Claims 43 and 44

Claims 43 and 44 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over WO 00/10216 (WO '216) in view of U.S. Patent Application Publication No. 2004/0220048 to Leban and further in view of WO 01/27501 (WO '501). This rejection

PATENT

Atty Docket No.: 200206643-1
App. Ser. No.: 10/697,687

is respectfully traversed because WO '216, Leban, and WO '501, considered singly or in combination, fail to disclose all of the features of independent Claim 34 and the claims that depend therefrom.

WO '216 and Leban fail to disclose or reasonably suggest all of the features of independent Claim 34 as discussed above. In addition, the Official Action cannot reasonably rely upon the disclosure contained in WO '501 to make up for the deficiencies in WO '216 and Leban. In fact, the Official Action only relies upon WO '501 for its alleged discussion of "cutting an ePTFE gasket in Fig. 1 to facilitate bending or folding of the gasket while reducing the stress of the bend on the ePTFE gasket." As such, even if a person of ordinary skill in the art were somehow motivated to combine the disclosures of WO '216, Leban, and WO '501, as suggested in the Official Action, the proposed combination would still fail to yield the present invention as claimed in independent Claim 34.

Accordingly, the Official Action has failed to prove that independent Claim 34, and thus, Claims 43 and 44, are *prima facie* obvious in view of the disclosures contained in WO '216, Leban, and WO '501. The Examiner is therefore respectfully requested to withdraw the rejection of Claims 43 and 44 and to allow these claims.

Newly Added Claims

New Claims 45-50 have been added to further define the scope of the invention. Claim 45 is allowable over the cited documents of record at least by virtue of its dependency upon allowable independent Claim 1. In addition, Claims 46-50 are allowable over the cited documents of record for at least the reasons set forth herein above with respect to Claim 21.

**RECEIVED
CENTRAL FAX CENTER****PATENT****JAN 17 2007**

Atty Docket No.: 200206643-1

App. Ser. No.: 10/697,687

Conclusion


In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

Dated: January 17, 2007

By


Timothy B. Kang
Registration No.: 46,423

MANNAVA & KANG, P.C.
8221 Old Courthouse Road
Suite 104
Vienna, VA 22182
(703) 652-3817
(703) 865-5150 (facsimile)